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Case No. EO-2025-0154
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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. EO-2025-0154

SURREBUTTAL TESTIMONY

OF

DEREK BROWN

ON BEHALF OF

EVERGY MISSOURI METRO AND EVERGY MISSOURI WEST

**Kansas City, Missouri
September 2025**

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SURREBUTTAL TESTIMONY

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I. Introduction and Executive Summary

Q: Please state your name and business address.

A: My name is Derek Brown. My business address is 818 S. Kansas Avenue, Topeka, Kansas.

Q: By whom and in what capacity are you employed?

A: I am employed by Evergy Kansas Central, Inc. I serve as Large Customer Strategy & Planning Director for Evergy Metro, Inc. d/b/a as Evergy Missouri Metro (“Evergy Missouri Metro” or “EMM”), Evergy Missouri West, Inc. d/b/a Evergy Missouri West (“Evergy Missouri West” or “EMW”), Evergy Metro, Inc. d/b/a Evergy Kansas Metro (“Evergy Kansas Metro” or “EKM”), and Evergy Kansas Central, Inc. and Evergy South, Inc., collectively d/b/a as Evergy Kansas Central (“Evergy Kansas Central” or “EKC”) the operating utilities of Evergy, Inc. (“Evergy”)

Q: On whose behalf are you testifying?

A: I am testifying on behalf of Evergy Missouri Metro and Evergy Missouri West (collectively the “Company” or “Applicants”).

Q: What are your responsibilities?

A: I lead all aspects of moving potential customers through the Path to Power process. In this position, I collaborate with various teams, including but not limited to Transmission Planning, Transmission and Substation Construction, Customer, Origination, Regulatory and Legal to ensure effective project delivery and alignment with our strategic objectives.

1 **Q: Please describe your education, experience, and employment history.**

2 A: I hold both a Bachelor's and Master's Degree in Electrical Engineering, Power Systems
3 from Kansas State University, and am certified as a Professional Engineer in Kansas.

4 I have held various technical and leadership roles at Evergy for 15 years. My current
5 role is Director of Large Customer Strategy and Planning. Prior to this role, I was a Senior
6 Manager of Regulatory Affairs at Evergy for three years, specializing in transmission
7 policy at the Federal, State, and Regional Transmission Operator ("RTO")/Independent
8 System Operator ("ISO") levels. I also held roles as an Engineer and Manager of
9 Transmission Planning and Operations Planning at Evergy for 12 years. I have significant
10 expertise in power flow, short-circuit, and dynamic modeling and was responsible for
11 developing and updating of Evergy's portion of the Southwest Power Pool ("SPP")
12 planning and operations models. I have also performed and overseen various studies using
13 these models to meet the Company's, National Energy Reliability Corporation ("NERC"),
14 and Southwest Power Pool ("SPP") Tariff requirements.

15 I have served as the company's identified subject matter expert for Transmission
16 Planning Standards; Modeling, Data, and Analysis Standards; and Nuclear Standards in
17 my previous roles at Evergy.

18 I have served as both a member and in leadership roles on SPP working groups and
19 task forces. Currently, I serve as Member of SPP Board-Level Consolidated Planning
20 Process Task Force, Market and Operations Policy Committee, SPP Economic Studies
21 Working Group, Transmission Owner Selection Process Task Force and am the Chair of
22 the SPP Transmission Working Group.

1 **Q: Have you previously testified in a proceeding before the Missouri Public Service**
2 **Commission (the “Commission” or “MPSC”) or before any other utility regulatory**
3 **agency?**

4 A: No.

5 **Q: What is the purpose of your surrebuttal testimony?**

6 A: The purpose of my surrebuttal testimony is to address Staff’s statements and positions
7 concerning Capacity, Energy, and Market issues, specifically those topics related to the
8 SPP.

9 **Q: Is Evergy actively involved in SPP?**

10 A: Yes. Evergy is one of the larger members of SPP and is an active participant in the SPP
11 Stakeholder process with representatives on almost all the 30+ stakeholder organizational
12 groups that work within SPP to develop policy and processes. Many of the Evergy
13 representatives hold leadership positions that allow for further influence and awareness on
14 the activities of the organizational groups. The SPP organizational groups provide guidance
15 in regard to, and approval of, all phases of the administration of SPP wholesale markets,
16 SPP planning functions, including transmission and generation, and also policies and
17 procedures for the reliable and secure operation of the bulk electric system.

18 Evergy representatives also meet regularly with the State Commission staffs and
19 their Cost Allocation Working Group representatives to discuss ongoing issues within SPP
20 and Evergy’s positions on those issues.

1 **II. Response to Staff's Report and Recommendation**¹

2 **Q: What is the purpose of this section of testimony?**

3 A: Staff includes a number of seemingly informational statements concerning the Company's
4 resource adequacy and developments at SPP. I will offer additional perspectives on these
5 items.

6 **Q: Please elaborate on SPP's latest changes in its resource adequacy requirements.**

7 A: As discussed by Staff on pages 15-18, SPP filed with the Federal Energy Regulatory
8 Commission ("FERC") proposing to implement changes to capacity accreditation for
9 certain generation resource assets. The accreditation methodology implements effective
10 load carrying capability for wind, solar, and electric storage assets, and a performance-
11 based accreditation methodology for thermal and other conventional generation resources.
12 See Staff Rec. at 15. Additionally, SPP approved minimum requirements for a utility's
13 planning reserve margin ("PRM") of 16% for summer and 36% for winter, effective 2026
14 and 2026/2027, respectively. See Staff Rec. at 17.

15 **Q: Is the Company taking steps to comply and adjust to these changes?**

16 A: Yes. Evergy continuously monitors and incorporates SPP's changes in its resource
17 adequacy requirements into its Integrated Resource Plan ("IRP") to ensure that Evergy has
18 sufficient energy to provide its customers with safe and adequate service. See Mo. Rev.
19 Stat. § 393.130.1. It is through these resource planning efforts that the Company maintains
20 a robust, resilient resource plan that considers least cost options to meet long-term planning
21 requirements, to meet our obligation to provide dependable, efficient, and affordable

¹ Staff Report and Recommendation ("Staff Rec." or "Recommendation").

1 service to Evergy's customers, and that they facilitate the continuation of Missouri's
2 successful economic development achievements.

3 **Q: Were SPP's capacity accreditation and planning reserve margin changes driven by**
4 **large load growth?**

5 A: No. There are numerous variables attributable to SPP's change in resource adequacy
6 requirements including weather, load growth, retiring of coal plants, and advancements in
7 generation resource technology. In my opinion, the effects of Winter Storm Uri in February
8 of 2021 were a primary driver of these changes.

9 **Q: On pages 111-112 of its Recommendation, Staff discusses large load integration. Is**
10 **Evergy familiar with this concept? If so, please elaborate.**

11 A: Yes. Evergy has played an active role in large load integration discussions by participating
12 in leadership and membership positions within SPP's stakeholder groups. As such, Evergy
13 has been involved in the development of SPP's High Impact Large Load ("HILL")
14 interconnection solutions, including those established in recent Revision Request 696
15 ("RR696"). This Revision Request is designed to streamline the integration of large loads
16 while maintaining system reliability and market efficiency.

17 **Q: What is the status of this Revision Request?**

18 A: The RR696 proposal was approved by the SPP Board of Directors on September 4, 2025,
19 and is a culmination of months of collaborative work across planning, operations, and
20 market design. It introduces a structured framework for integrating large loads, such as
21 data centers, hydrogen electrolyzers, and industrial facilities into the transmission system.
22 Specifically, introduces a more robust study process that includes enhanced stability
23 analysis, ride-through capability assessments, and localized system impact evaluations.

1 SPP now requires detailed load forecast submissions from Transmission Customers
2 (“TCs”) for HILLs, including ramp rate limitations and operational behavior modeling, to
3 ensure grid reliability and accurate market participation. The framework also introduces
4 the High Impact Large Load Generation Assessment (“HILLGA”), which enables
5 supporting generation to be studied alongside the load it serves, with results delivered
6 within 90 days provided all required data is submitted and agreements are signed. HILLGA
7 includes two study paths: one for common bus configurations where the load and
8 generation share a point of interconnection, and another for local area configurations where
9 the load and generation are within two buses. These paths are designed to limit grid
10 injection and align generation deliverability with system capacity. Evergy has contributed
11 technical feedback on HILL and HILLGA study methods, criteria, and timelines
12 throughout the SPP stakeholder process. For example, Evergy worked with SPP staff and
13 stakeholders to move the load ramp limit from the SPP Tariff to the market protocols to
14 improve the efficiency and timeliness of any future updates to it possible without FERC
15 having to approve it through a Tariff filing.

16 **Q: Is Evergy making changes to its processes to accommodate these developments?**

17 A: Yes. Evergy’s internal planning processes already incorporate some of the planning
18 analysis principles now being formalized in RR696. For example, Evergy already performs
19 stability analysis when evaluating a HILL and works with SPP staff to ensure any
20 additional issues identified in this analysis will be mitigated by the solutions recommended
21 by SPP. Additionally, we engage with current and prospective large customers on an
22 ongoing basis to obtain the latest load profiles, forecast growth, and evaluate system
23 impacts. This information is incorporated into the standard data submittals we supply SPP

1 and ensure alignment between SPP and Evergy on future transmission system needs and
2 their associated solutions to preserve reliability of the system.

3 Overall, Evergy's active participation in SPP's large load integration discussions
4 ensures that its stakeholders and customers are represented in shaping SPP's, particularly
5 large load, evolving policies.

6 **Q: Do you foresee any large load integration issues developing that could impact the**
7 **Company's Large Load Power Service ("LLPS") Rate Plan?**

8 A: No. The LLPS Rate Plan was designed with flexibility and scalability in mind. The changes
9 proposed in RR696, including the HILL registration and study process, do not alter the cost
10 allocation mechanisms underpinning the LLPS tariff. While RR696 introduces a new
11 category of load and enhanced study practices and reporting requirements, these changes
12 do not alter the cost allocation mechanisms underpinning Evergy's LLPS tariff. The LLPS
13 Tariff's pricing components (demand charges, energy rates, and rider options) are based
14 on Evergy's cost of service and customer usage characteristics, not on SPP's transmission
15 planning or interconnection study outcomes. As such, Evergy does not anticipate any
16 adverse impacts to the LLPS Rate Plan or its cost structure.

17 **Q: Staff mentions recent Large Load Stakeholder Engagement meetings at the SPP and**
18 **possible changes for large load interconnection. Are there any developments to report**
19 **related to those efforts?**

20 A: Yes. One of the most notable developments underway is Conditional High Impact Large
21 Load Service (CHILLS), a new non-firm transmission service designed to accommodate
22 large loads that cannot be reliably served under existing firm service conditions. CHILLS
23 would allow for interconnection and service under a structured, time-limited framework,

1 with the expectation that the customer will pursue firm service within seven years. This
2 temporary service is proposed to be interruptible for reliability reasons and includes
3 specific curtailment protocols that may be triggered even before SPP declares Conservative
4 Operations.

5 Importantly, while the development of CHILLS represents a new interconnection
6 and transmission service pathway for large loads, it is not anticipated to require changes to
7 Evergy's LLPS Rate Plan or our Path to Power process. CHILL is currently undergoing
8 stakeholder review and is expected to be presented for final approval to the SPP Board of
9 Directors in **November 2025**, following MOPC action in **October 2025**. If approved,
10 implementation would begin in **early 2026**, with service agreements and study processes
11 available shortly thereafter.

12 Looking further ahead, SPP is also in early development of a new product
13 called Price Adaptive Load (PAL), which would allow loads—large or small—to respond
14 dynamically to real-time market prices. PAL is intended to support flexible, price-sensitive
15 operations and may be particularly attractive to customers with scalable or interruptible
16 processes. While still in early development, PAL is expected to enter formal stakeholder
17 review in Fall 2025, with policy approval targeted for January 2026 and final Revision
18 Request language anticipated by April 2026. Evergy is actively monitoring and
19 participating in these discussions to ensure our customer offerings remain aligned with
20 regional market innovations.

1 **Q: Staff argues on pages 22-25 and 30 of its Recommendation that each LLPS customer**
2 **should be registered with SPP as a separate commercial pricing node. Is this approach**
3 **commonly used within SPP?**

4 A: No. Neither SPP's Integrated Marketplace Protocols (Protocols) nor Tariff include the
5 defined term of "commercial pricing nodes" but the Protocols do define Price Nodes as "A
6 single node in the Commercial Model that has a one-to-one relationship to an Electrical
7 Node where Locational Marginal Prices are calculated." Evergy is not aware of any
8 instance in SPP where a customer is registered to a separate and specific Price Node.

9 **Q: What utility operational concerns are associated with registering a large load**
10 **customer as a separate commercial pricing node?**

11 A: Registering a large load customer as a separate commercial pricing node introduces several
12 operational and strategic concerns for the utility if the large load is bid in separately from
13 the rest of the Evergy load on the system:

14 1) In the SPP Day-Ahead ("DA") market, energy demand bids can't be viewed
15 in a silo and are often influenced by broader considerations and do not
16 always align with actual load forecasts. This misalignment can lead to
17 inefficiencies in market participation and increased exposure to real-time
18 price volatility. Introducing a separate pricing node for a single customer
19 could exacerbate this issue by isolating their load from the broader portfolio,
20 reducing the utility's ability to optimize across its system.

21 2) Forecasting individual loads is inherently more error-prone than forecasting
22 aggregated system loads. This increases the risk of imbalance charges and
23 complicates settlement processes. Additionally, splitting out a single load

introduces back-end system changes and reconciliation challenges that can be costly and time-consuming to implement and maintain.

- 3) Managing an additional commercial pricing node requires more resources. Market operations staff would need to monitor, forecast, bid, and settle each of this type of load independently, increasing the administrative burden. This could necessitate additional staffing or reallocation of existing resources, impacting operational efficiency.

Q: What risks are associated with separate commercial pricing nodes?

A: There are a multitude of issues with the disaggregation of commercial pricing nodes. First, the settlement process would forego the single, unified energy charge and would require separate accounting for fuel procurement expense, uplift charges, and congestion-management costs.

Second, disaggregation magnifies forecasting errors. Under an aggregated model, any over or under-estimation at a specific node is statistically decreased by the diversity of the broader portfolio. Once the portfolio is separated into discrete, high-volume nodes, that diversity benefit evaporates, and forecasting inaccuracies accumulate, thereby increasing imbalance charges and volatility in settlement results.

Third, assessing nodal pricing on an individual basis could increase potential incremental uplift obligations. Similar to the situation just described, under an aggregated model, any over or under-estimation at a specific node is statistically decreased by the diversity of the broader portfolio. Once the portfolio is separated into discrete, high-volume nodes, that diversity benefit of an aggregated model is lessened, and forecasting inaccuracies accumulate, thereby increasing volatility in settlement results.

1 Fourth, separate nodes require the utility to allocate its resource stack on a nodal,
2 rather than system basis. This would require the utility to decide which generation asset
3 would be assigned to each node, which increases concerns of cross-subsidization and
4 transparency, contrary to Section 393.130.7.

5 Fifth, regarding fuel procurement, unless new contractual mechanisms are
6 developed, there is no clear, tariff-supported methodology for allocating those fuel costs to
7 discrete settlement locations, exposing the utility to prudence challenges and customers to
8 unanticipated cost shifts.

9 Finally, congestion hedging issues would be raised if separate pricing nodes were
10 implemented. If multiple commercial nodes are established, the utility must either
11 subdivide the existing Network-Integrated Transmission Service Agreement (“NITSA”) or
12 procure additional congestion hedges, each of which introduces incremental administrative
13 burden, potential shortfalls in hedge coverage, and corresponding financial exposure for
14 customers.

15 **Q: Staff explores Day Ahead and Real Time Imbalances occurring within the SPP**
16 **Integrated Marketplace. Have they represented this topic correctly?**

17 A: No, as discussed below, Staff’s explanation is not correct.

18 **Q: Are real time locational marginal prices in SPP always higher than day ahead prices?**

19 A: No. Real time Locational Marginal Prices (“LMPs”), the prices of electricity at a specific
20 point on the power grid, are not always higher than day ahead prices. The relationship
21 between day ahead and real time prices is driven by a variety of dynamic market factors
22 including load forecast accuracy, weather variability, generator availability, and

transmission congestion. For example, in 2024, the average real time market price was \$26.18 and the day ahead price was \$27.56.²

Q: How would you describe imbalances occurring today? Does the Company see variation currently?

A: Real time deviations from day ahead market submissions/expectations drive imbalances. These occur all of the time and are not evidence of some mistake or oversight, but instead natural fluctuations occurring within the market. Examples of imbalances Every currently observes.

- Load Forecast Accuracy: Deviations between forecasted and actual load can cause real-time prices to diverge from day-ahead expectations. For example, if actual demand is lower than forecasted, real-time prices may fall below day-ahead prices.

- Weather Variability: Sudden changes in weather—such as unexpected cloud cover, wind shifts, or temperature swings—can impact both generation availability and load, influencing real-time prices independently of day-ahead projections.

- Generator Availability and Outages: Real-time prices can spike or drop depending on the availability of generation resources. Unplanned outages or ramping limitations can create scarcity or surplus conditions not reflected in the day-ahead market.

- System Topology and Congestion: Transmission constraints and changes in system topology (e.g., line outages or switching) can lead to localized

² See SPP, “State of the Market 2024” at 1 (May 28, 2025).

1 congestion in real time, affecting LMPs in ways that were not anticipated in
2 the day-ahead market.

3 **Q: On pages 29-30 of its Recommendation, Staff proposes that LLPS customers,**
4 **pursuant to Section 393.130.7, should have separate pricing nodes because they are**
5 **“non-conforming loads.” Does Evergy agree?**

6 A: No. Staff’s Recommendation conflates LLPS customers with the “non-conforming load”
7 designation used in the Market Protocols for SPP Integrated Marketplace. That conflation
8 is inaccurate and risks mischaracterizing the nature of LLPS customers and the purpose of
9 the non-conforming load designation. “Non-conforming loads” are typically those with
10 atypical or unpredictable load shapes that deviate significantly from standard load
11 forecasting models. On the contrary, the LLPS customers, such as data centers, advanced
12 manufacturing facilities, and hydrogen production are highly metered, forecastable, and
13 often operate with consistent load profiles. Moreover, the assertion that more granular data
14 from LLPS customers must be embedded in the tariff contracts to ensure reliability is
15 unnecessary. Evergy already has robust internal processes in place to engage with large
16 customers during the interconnection and onboarding process through the Path to Power.
17 Evergy routinely collects detailed operational data, conducts load forecasting, and
18 coordinates with our transmission and distribution planning teams to ensure system
19 readiness.

20 It is also important to distinguish between planning and operations. Planning is a
21 forward-looking, collaborative process that Evergy conducts with customers and regional
22 stakeholders. Operations, on the other hand, are real-time and governed by market rules
23 and system constraints. Embedding planning requirements into the tariff, especially when

1 they are already being met through existing utility practices, adds administrative burden
2 without improving reliability outcomes.

3 **Q: Would separate pricing nodes have an impact on the Company's Fuel Adjustment**
4 **Clause ("FAC")?**

5 A: I understand it would. As I understand it, the FAC currently manages costs for the system
6 as a whole. Any effort to subdivide the Company interactions with the Integrated
7 Marketplace would introduce additional cost information that would have to be accounted
8 for in the FAC calculations. As noted in the testimony of Mr. Brad Lutz, the Company
9 considered FAC effects in the Company proposal. We expect approval of Staff's LLPS
10 would require some level of confirmation to ensure all of the new elements are incorporated
11 into the FAC correctly.

12 **III. Conclusion**

13 **Q: Please summarize your testimony regarding Staff's Recommendation.**

14 A: Evergy's LLPS Rate Plan aligns with SPP market practices and Missouri law, supporting
15 reliable and cost-effective service for large loads. Evergy is actively engaged in the SPP
16 stakeholder processes used to develop the policies and enhance the study methods used to
17 grant service to large loads and has incorporated SPP's new resource adequacy
18 requirements into its planning to ensure system reliability. Additionally, separate
19 commercial pricing nodes for individual customers are not used in SPP and would
20 introduce unnecessary complexity, increase forecasting, and risk. The Commission should
21 reject Staff's nodal proposal and approve the Company's LLPS Rate Plan.

22 **Q: Does this conclude your testimony?**

23 A: Yes.

ANTHONY R WESTENKIRCHNER
NOTARY PUBLIC - NOTARY SEAL
STATE OF MISSOURI
MY COMMISSION EXPIRES APRIL 26, 2029
PLATTE COUNTY
COMMISSION #17279952